

Ned Herrmann The Creative Brain.

In his book, The Creative Brain, Ned Herrmann represents the many ways that human beings respond to the demands on them as four main quadrants of mental activity. But in practice, no quadrant exerts exclusive influence over any person. Preferences occur in patterns or profiles. These profiles are compiled by ranking each individual's preference, competence or avoidance of each of the four quadrants, A, B, C and D.

To create an informal personal profile, read the descriptions of each quadrant, and assign a response number that reflects your attitude to that quadrant's activities. Preferred mode is 1 and reflects the way you choose to do things given a choice; Competent mode is given a 2 and reflects the way you can function but not your first choice; and Avoidance mode is given a 3 and reflects those activities which you find difficult or exhausting to do. You may list more than one of any mode. For example, a profile of "A1 B 3 C 1 D 1" is perfectly acceptable. The profile gives you a way to model your own thinking style. The following descriptions of persons who are dominant in a single quadrant (A only = 1333 for example) reveal the influence exerted on personality and perception by the individual quadrants.

A Quadrant Preference

Leonard Nimoy's portrayal of Mr. Speck is a wonderful example of the A quadrant personality at its highest functioning. But as he's only half human, we'll use another example to get a sense of what A is. Let's take a profile of 1-3-3-3, a primary preference for A and an avoidance for any of the other modes. Let's call this person A-only.

Preference for A quadrant means the person favors activities that involve analyzing, dissecting, figuring out, solving problems logically, and getting facts. In making decisions, the person relies on logic based on certain assumptions, combined with an ability to perceive, verbalize, and express things precisely. The person favors reducing the complex to the simple, the unclear to the clear, the cumbersome to the efficient. Facts are crucial underpinnings for verbal statements. These statements can be abstracted to form even more succinct phrases such as, "Time is money." Moreover, the same method can be used to simplify statements used for decision making, such as, "Whatever the issue, saving time is the rule, so do it the faster way." The point is the whole logical structure must hang together in order to satisfy the A quadrant mentality.

A-only is a master of logic and reason: At his best he is constantly processing new information, even if it assails the validity of a treasured formula. The definition of reality is of prime importance, and no fact should long lack explanation for its existence. A-only's output takes the form of principles, mathematical formulas, and conclusions about where to go next. His abilities to generalize from the specific and verbalize those generalizations make him an ideal technical problem-solver.

When A-only does something—anything—he figures out the most efficient way of doing it so he can conserve effort, especially repetitive effort. He also calculates the odds, and if they're excessively high, he won't move. In business, as in other areas, he honors argument above personal experience, facts above intuition (which he may discount altogether as a fabrication).

He tends to avoid emotion altogether: If there is trouble at home, for example, rather than asking how people feel and why, he'll look for needs he can fill without having to confront his emotions. e.g., by adding a new room or swimming pool or by simply discontinuing conversation on the subject. If he believes in God, it may be only because facts and logic have taken him to that conclusion, rather than because of any intuitive knowing or revelation.

With avoidances in B, C, and D, A-only would be severely handicapped in functioning. To survive in the world of business, for example, A-only would need to work in a quite isolated ivory tower of sorts, someplace where the fear of emotion, the distaste for detail, and the inability to visualize wouldn't matter. A-only would survive quite well on a diet of facts and questions about things. He would need computers and would prefer some obedient robots to run numbers and confirm calculations. He would dictate the results of his work into a machine and correct the type-written copy when it returned.

A-only's avoidance of other quadrants affects the way he strikes others. Because he is not an emotional person, he appears cold, aloof, and arrogant. Because he's not visual, he also may appear limited—which in B, C, and D quadrant modes he is. He tends to discount the importance of human feelings, boredom, fatigue, and need for beauty and refreshment. His solutions, while logical, are often impractical because he's ignored the very real barriers of, say, dealing with human inertia or fixed attitudes. And because his thinking is linear, he may embody the ultimate in logical brilliance, but his logic chains him to the ground: He can't make the creative leap required to set a new direction. His possibilities are limited by what is already known or deducible from what is already known.

But A-only is smart in his own way and if material can be presented to him logically, he is open to it. Spock, for example, in *Star Trek IV*, finds it illogical for an entire crew to put themselves in jeopardy to save one member. "But," he reasons at the ensuing trial, "that is how humans behave [fact]." And he may add, "I am, after all, half human."

B Quadrant Preference

B-only bears a number of similarities to his cousin, A-only. They are both verbal. They both take a linear approach to things and reject ambiguity—B-only even more so than A-only. Both distrust emotions and intuition. Both also tend toward controlling their environment and themselves, mainly by imposing thought over reality. They are also both efficient.

However, B-only differs from A-only in several significant ways. Where A-only focuses on facts, logic, and the here-and-now, B-only wants to know what has worked in the past ("If it worked before, it will work again"). A-only devises formulas, B-only tests them down to the last jot and tittle. B-only is basically action-oriented and may therefore have little patience or respect for the intellectual complexities that A-only finds so compelling. "Can we verify it? Is it an answer? Let others ask interesting questions." B-only wants answers-only.

B-only's heaven is a world where there's a rule and a place for everything; it's a neat, dependable world, where decisions are made according to long-established procedures. If something has worked before, let it keep working. "If it ain't broke, don't fix it" He thus preserves the tried and true, but often may defeat progress.

A-only and B-only each have their own kind of efficiency: B-only's efficiency has to do with making sure things are done on time and correctly to the last detail the first time around, No

shortcuts for B-only. "Make the first time you do a thing the last time anyone has to."

One of the strengths of B quadrant is the ability to focus on one thing at a time. When you want to see things get done, watch B quadrant people work. They pick up one thing, finish it, put it down, pick up another, finish that, put

it down. Sometimes B quadrant is like the tortoise in the race between the tortoise and the hare:

Because of sheer dogged persistence, B quadrant people often win the race while others with equal or greater talent and vision, but to B power, fall away to the side. If you want perfection in detail, B-only is the answer to your prayer. B-only is rigorous and demanding toward himself and his subordinates. Procedure and precision are sacred, and failure to conform to protocol is seen as threatening the entire operation-which sometimes it is, as NASA has learned to our sorrow.

B-only's preference is to keep things safe and predictable - to such an extent that he typically lacks a sense of possibility. When his aversion to the unproven is extreme, he may even discount the evidence of his own eyes if the evidence fails to fit into established, verbally definable structures. He also rejects ambiguity of any kind, which immediately eliminates the sensual, feeling, and intuitive modes from consideration. As a result, others tend to see B-only as domineering and small-minded, boring, insensitive, and anti-social. Because he fears a loss of control, his efforts to control others often intrude and offend. For him, as for A-only, emotions constitute an unpredictable, and therefore unwelcome, variable. Those with preferences in other quadrants tend to write B-only off as dense. However, it's not true. B-only has an absolute genius for bringing order out of chaos. Starting with the smallest piece of an enormous pile he can eventually create neat categories of classifications, plus a procedure for keeping them precisely classified. Without the kind of efficiency and clarity that B-only makes possible, the world could not operate as it does.

Given the strain of keeping so much under tight control, it's not surprising that B-only has difficulty with change and emotions, because both have their own unique logic. The prospect of change means realigning every tiny detail so it is painstakingly ordered. It means the predictability B-only has labored so hard to establish is at risk. The consequences: loss of control and, therefore, loss of safety.

When faced with change, B-only may take one of two courses; (1) If he values procedure over practicality, he may narrow his perceptions to see only those portions of life that are still controllable, and ignore or deny those parts that are changing. (This syndrome was identified by Alvin Toffler as Future Shock: the phenomenon experienced by people when the pace of change outraces their ability to adjust.) (2) B-only may work harder to establish an interim order of sorts until the new order has become apparent. In the first instance, B-only can endanger self and coworkers-the best thing to do is to accept his self-imposed constraints and place him in a limited role doing repetitive or procedural work that can't interfere with the conduct of other aspects of existence. Above all ; has authority over others needs to be curtailed during this most stressful period. In the second instance, B-only helps in the transition period by: (1) carrying out those activities on which people are accustomed to relying; and (2) testing A-only formulas to see if they actually work, and providing feedback. The modern world couldn't be what it is without B-only's around to help stabilize it.

We turn now to the right-brain modes, which reject precision for a different kind of "knowing," and which in many ways are out of joint in this left-brained world of ours.

C Quadrant Preference

Of all the quadrants in the brain, C quadrant might be looked upon as the most sensitive and receptive. C-only sops up experience like a sponge-about mood, atmospheres, attitudes, and energy levels. She is a moment-by-moment barometer of what's going on with the people around her. She is as concerned with reality as A-only, but its a very different reality, consisting not of words. but of emotional currents. When the mood of an individual or group changes, C-only is immediately aware of the change and is ready to respond to it, usually in a soothing or conciliatory way.

Although intensely aware of externals in terms of the world, and especially the people around her, C-only perceives them with her own body-through her own internal experience. She tends to be what is called kinesthetic, which means that perception and communication are experienced as a free-flowing sequence of body sensing and movement, more than of visual or verbal information. Not in the least linear in functioning, C-only has little time for logic or theory. For her, theory is something removed from reality, whereas experience is reality. Her primary modes are emotional and spiritual. Her comfort with her body tends to give her an essential sense of belonging in this world. She seems to have an innate sense that a Creator exists who cares for all of us, that we belong to a spiritual family, and that were here on earth to help each other be tender, grow, and change. Goals mean nothing if they violate human process. She has faith in groups and is open to the contribution of each person to a process or goal_ Personal satisfaction is a prime measure of the success of anything. She is spiritual, empathetic, nurturing, and musical.

On the downside, because of her aversion to the A, B, and JD quadrants, C-only can be flaky, undisciplined, sentimental to the point of being maudlin, and, when the time comes to get something done, impractical because of her refusal to deal with facts and goals, time and money. Where B-only tends to constrict, C-only tends to expand. One of her modes of expansion may be conversation. Communicating is very important to her, and so it's rare to find a taciturn C. The problem is that most of what she's really talking about is very hard to verbalize, so the conversation flow-the connection-becomes more important than the content. Other C-onlys understand this intuitively, but a verbal A or B can find the continual talk frustrating, unfocused, and demanding.

C-only and B-only share a preoccupation with the past, but in different ways. B-only wants to know what worked before so he can stay safe. C-only reverts traditions because of their emotional value: They comfort and inspire people. Others tend to see C-only as agreeable, nice to have around, supportive of harmony and beauty, and quite often sentimentally so, and always people-oriented. C-only is also frequently thought to be somewhat of a nonconformist by A and B standards. Even more so is her cousin, D-only, to whom we now turn.

D Quadrant Preference

D-only is a 3-3-3-1; that is, a person with a very strong preference for D quadrant and avoidances in all other areas. At first meeting, the most outstanding thing you would notice about D-only is that you probably couldn't understand much of what she was saying. Most of her conversation would be in metaphors, introduced by "It's like," but she would provide no translation of how the metaphor helps make "it" clear or even what the "it" is.

Once in a while, however, you'd catch a glimpse of what she is seeing, and you might be blown away by the sheer originality, beauty, or wildness of it. D-only thrives on the excitement of new ideas, possibilities, variety, oddities, incongruities, and questions that sound obvious but actually go to the heart of the matter. Surprises, non sequiturs, and uncertainties are all possibilities. With lots of that kind of grist for her mill, she tends to be a true visionary, in the best sense of the word. The visions may be just that: images of ideas in metaphoric terms.

The Beatles' movie, *Yellow Submarine*, is a D quadrant creation (made with a lot of A, B, and C quadrant support, of course). It is imaginative, colorful, artistic, fanciful ; open-ended, and quite confusing from time to time. Even more suited to D-only taste is the movie, *2001: A Space Odyssey*. Science fiction is the stuff of which D-only's daydreams are made.

Although D-only's have their own language, they often don't understand each other or even themselves. But that's okay, because to them, as to C-only's, understanding is less valuable than experience. That they understand!

D-only's downside, because she's unsupported by A, B, or C preference, is that under no circumstances can she be counted on to make a deadline or even complete a task at all. She also is not very good at working with others, not so much because of her unreliability ; but for two other reasons. First, she's largely nonverbal. D-only has trouble explaining even something she's very clear about. She doesn't have many words—mostly she has pictures. It's hard for her contribution to be realized on a team, unless one of the other members has multiple preferences with a strong D so he or she can translate D-only for the rest of the team.

The second reason she's tough to have on most teams is that she's impersonal. Her own process comes first and she doesn't have C-only's need to connect. Moreover, she doesn't want to slow down to the speed she'd have to go at in order to let someone else catch up. Nor does she want to take the energy to develop a structure for presenting her material—that's A and B quadrant work for C quadrant reasons.

D-only actually fears structure because she feels it slows or stops the flow of ideas and energy. Words do the same. (Imagine looking at a motion picture and trying to describe it to someone who can't see.) Logic also impedes free flow, because it's based on assumptions, which are based, in turn, on a fixed interpretation of what is already past. She doesn't even want to pay attention to the here-and-now: It also gets in her way, whether it's the material detail and procedures of the here-and-now B-only deals with, or the emotional here-and-now to which C-only's are so attuned.

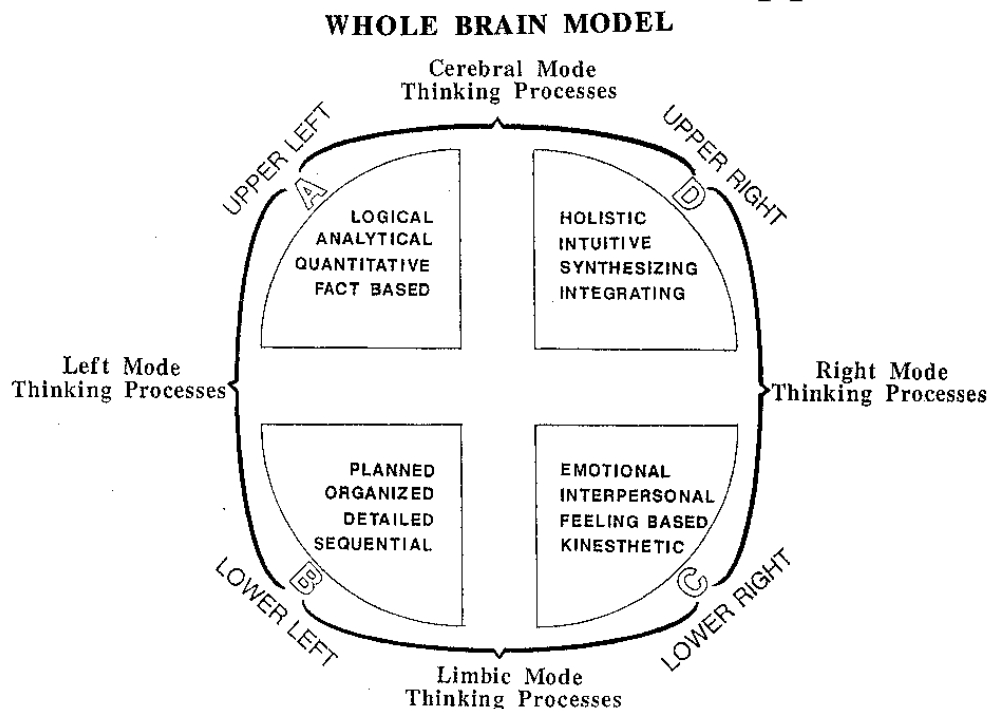
The challenge for D-only is to accommodate the realities of the other quadrants by considering them useful contributions to her own process, rather than as impediments only. She needs to learn that present reality can be a springboard, not just an anchor. She must also understand that she needs the rest of us poor mortals if her visions are ever to become a reality.

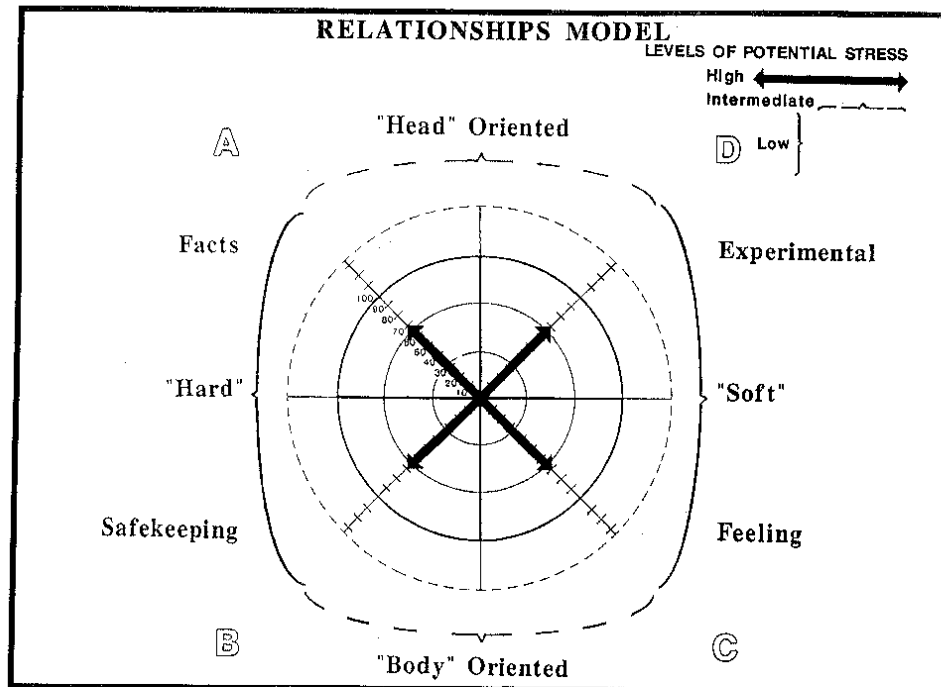
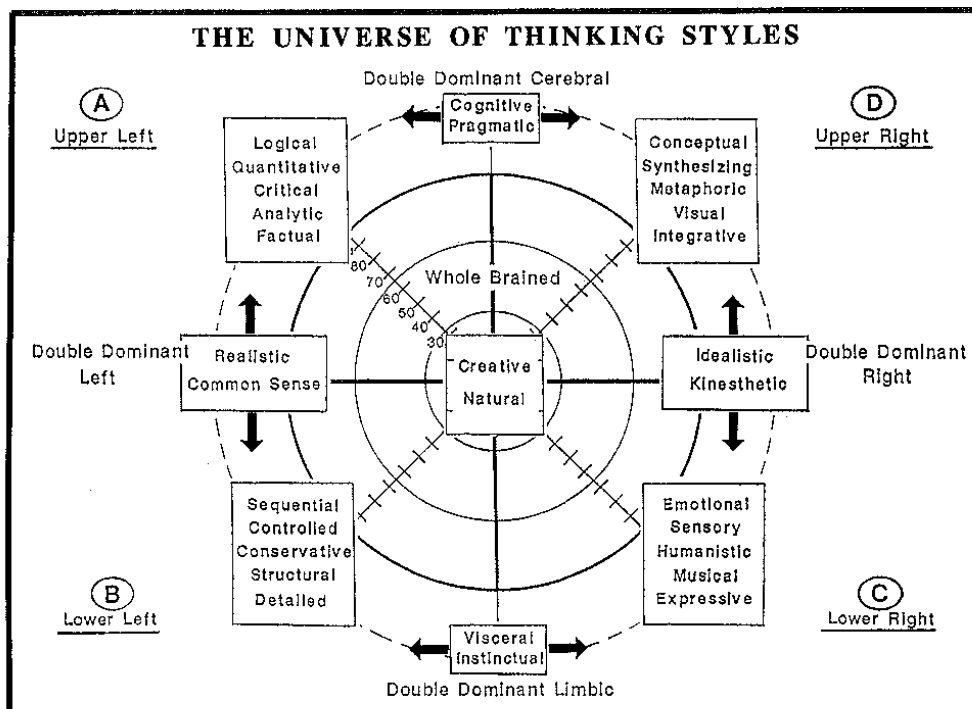
WHOLE BRAIN LEARNING AND DESIGN CONSIDERATIONS

A-UPPER LEFT		D-UPPER RIGHT	
LEARNS BY:	LEARNERS RESPOND TO:	LEARNS BY:	LEARNERS RESPOND TO:
ACQUIRING AND QUANTIFYING FACTS APPLYING ANALYSIS AND LOGIC THINKING THROUGH IDEAS BUILDING CASES FORMING THEORIES	FORMALIZED LECTURE DATA BASED CONTENT FINANCIAL/TECHNICAL CASE DISCUSSIONS TEXT BOOKS AND BIBLIOGRAPHIES PROGRAM LEARNING BEHAVIOR MODIFICATION	TAKING INITIATIVE EXPLORING HIDDEN POSSIBILITIES RELYING ON INTUITION SELF DISCOVERY CONSTRUCTING CONCEPTS SYNTHESIZING CONTENT	SPONTANEITY FREE FLOW EXPERIENTIAL OPPORTUNITIES EXPERIMENTATION PLAYFULNESS FUTURE ORIENTED CASE DISCUSSIONS VISUAL DISPLAYS INDIVIDUALITY AESTHETICS BEING INVOLVED
B-LOWER LEFT		C-LOWER RIGHT	
LEARNS BY:	LEARNERS RESPOND TO:	LEARNS BY:	LEARNERS RESPOND TO:
ORGANIZING AND STRUCTURING CONTENT SEQUENCING CONTENT EVALUATING AND TESTING THEORIES ACQUIRING SKILLS THROUGH PRACTICE IMPLEMENTING COURSE CONTENT	THOROUGH PLANNING SEQUENTIAL ORDER ORGANIZATIONAL AND ADMIN. CASE DISCUSSIONS TEXT BOOKS BEHAVIOR MODIFICATION PROGRAM LEARNING STRUCTURE LECTURES	LISTENING AND SHARING IDEAS INTEGRATING EXPERIENCES WITH SELF MOVING AND FEELING HARMONIZING WITH THE CONTENT EMOTIONAL INVOLVEMENT	EXPERIENTIAL OPPORTUNITIES SENSORY MOVEMENT MUSIC PEOPLE ORIENTED CASE DISCUSSIONS GROUP INTERACTION

Herrman, *The Creative Brain*. Lake Lure, NC: The Ned Herrman Group, 1993.

Appendix E





DIFFERENCES IN PROCESSING MODES

	Upper Left A	Lower Left B	Lower Right C	Upper Right D
Descriptors	logical factual critical rational analytical quantitative authoritarian mathematical	technical reader data collector conservative controlled sequential articulate dominant detailed	musical spiritual talkative symbolic emotional intuitive (re- garding people) reader (personal)	creative/innovative intuitive (regard- ing solutions) simultaneous synthesizer holistic artistic spatial
Skills	problem solving analytical statistical technical financial	planning supervising administrative organizational implementation	expressing ideas interpersonal writing (cor- respondence) teaching training	creative innovative integrative causing change conceptualizing strategic planning
Typical phrases used	"Tools" "Hardware" "Key point" "Knowing the bottom line" "Take it apart" "Break it down" "Critical analysis"	"Establishing habits" "We have always done it this way" "Law and order" "Self discipline" "By the book" "Play it safe" "Sequence"	"Team work" "The family" "Interactive" "Participatory" "Human values" "Personal growth" "Human resources" "Team development"	"Play with an idea" "The big picture" "Cutting edge" "Broad-based" "Synergistic" "conceptual blockbusting" "Innovative"
Typical derogatory phrases (zingers) used by others	"Number cruncher" "Power Hungry" "Unemotional" "Calculating" "Uncaring" "Cold fish" "Nerd"	"Picky" "Can't think for himself" "Unimaginative" "Stick-in-the-mud" "Grinds out the task"	"Bleeding heart" "Talk, talk, talk" "Touchy-feely" "A push over" "Soft touch" "Sappy"	"Reckless" "Can't focus" "Unrealistic" "Off-the-wall" "Dreams a lot" "Undisciplined" "Head in clouds"

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